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GLOBAL RESEARCH
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EXAMINER
CHOI, PETER H

ART UNIT	PAPER NUMBER
3623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

JF

	Application No.	Applicant(s)
Office Action Summary	09/681,267	JOHNSON, TIMOTHY LEE
	Examiner	Art Unit	
	Peter Choi	3623	Pc

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 March 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>19 September 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/26/01</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-18 are pending in the application.

Information Disclosure Statement

2.   The information disclosure statement filed by the applicant cites only 2 U.S

Patent documents. However, the applicant has also submitted non-patent literature

entitled "Profit Maximizing Credit Line Management Strategy" without citation of

relevance in the specification. Correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the enablement requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the

invention.

4.   Claims 1, 7, 13, and 18 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims make reference to an updating of the decision rule set in accordance with a probability. From the disclosure in the claims and specification, it is unclear how the updating of the decision rule set is impacted. From the current wording of the claims, it could be misconstrued to mean that there exists some probability that every time a user views a certain web page, the decision rule set is updated. It could also be interpreted as meaning that every time a user goes from web page "A" to web page "B", then the decision rule set is updated. Correction is required.

In claims 1,7,13 and 18, the applicant has disclosed a method/system/software for using a decision rule set to "select either one of a plurality of first signals or one of a plurality of second signals, for sending to the display, the one of the plurality of second signals being to solicit information about the user;" From the claim language, there is no disclosure of what is being sent to the display. However, the applicant has disclosed in the specification that the user is directed to a certain webpage. For the purposes of the following art rejection, the examiner has interpreted this passage to read "select either one of a plurality of first signals or one of a plurality of second signals, for sending additional information to the display, the one of the plurality of second signals being to solicit information about the user;" Correction is required.

5.   Claims 4 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the enablement requirement and as failing to comply with the written

description requirement. The claim(s) contains subject matter which was not described

in the specification in such a way as to enable one skilled in the art to which it pertains,

or with which it is most nearly connected, to make and/or use the invention, and further,

contain subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. In claims 4 and 10, the

applicant has made reference to an Adaptive Homing Process. In the specification, the

applicant has disclosed that the Adaptive Homing Process is an application of the

Adaptive Homing Algorithm. The applicant has failed to disclose how the Adaptive

Homing Algorithm or the Adaptive Homing Process is applied to the invention.

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 4 and 10 provide for the use of an "Adaptive Homing Process", but, since

the claims do not set forth any steps involved in the method/process, it is unclear what

method/process applicant is intending to encompass. A claim is indefinite where it

merely recites a use without any active, positive steps delimiting how this use is actually

practiced.

In dependent claims 2 and 3, the applicant is claiming "the method of claim 1, wherein using includes conditioning selection...". No clear reference is made as to what is being "used" in these methods. The examiner has interpreted this to be a reference to the usage of the decision rule set disclosed in claim 1. For purposes of the following art rejection, the examiner is interpreting claims 2 and 3 to read, "the method of claim 1, wherein using said decision rule set includes conditioning selection....".

In dependent claims 14 and 15, the applicant is claiming "the system of claim 13, wherein means for using comprises means for conditioning selection...". No clear reference is made as to what is being "used" in these methods. The examiner has interpreted this to be a reference to the usage of the decision rule set disclosed in claim 13. For purposes of the following art rejection, the examiner is interpreting claims 14 and 15 to read, "the method of claim 13, wherein means for using said decision rule set comprises conditioning selection....".

For the purposes of the following art rejection, the examiner has interpreted these claims to the best of his ability in view of the applicant's specification.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is
directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1)   whether the invention is within the technological arts; and

(2)   whether the invention produces a useful, concrete, and tangible results.

For a claimed invention to be statutory, the claimed invention must be within the
technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural
phenomena) that do not apply, involve, use, or advance the technological arts fail to
promote the "progress of science and the useful arts" (i.e., the physical sciences as
opposed to social sciences, for example) and therefore are found to be non-statutory
subject matter. For a process claim to pass muster, the recited process must somehow
apply, involve, use, or advance the technological arts.

Claims 1-17 only recite an abstract idea. The recited system of using user
response to update a decision rule set that determines what to send to the display does
not apply, involve, or use the technological arts since all of the recited steps can be
performed in the mind of the user or by use of a pencil and paper. The claimed
invention, as a whole, is not within the technological art as explained above, and claims
1-18 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the terms "logic", "Adaptive Homing Process" and "Markov Decision Process".

Use of the term "logic" is considered to be non-statutory, as it is recited without reference to a computer program or software. Logic could simply be a reference to a common rule of thumb, or some metric to measure user response. Use of the terms "Adaptive Homing Process" and "Markov Decision Process" are considered to be non-statutory, as the applicant has stated in the specification that an "Adaptive Homing Process" is simply an application of the Adaptive Homing Algorithm and that a "Markov Decision Process" is the process for updating the model and rule set based on a Markov Chain. It is old and well known in the art that any mathematical algorithm can be calculated by hand using pencil and paper. Therefore, the terms discussed are taken to merely recite a field of use and/or nominal recitation of technology.

Software, programming, instructions or code ("plurality of instructions executable by a processor" in claims 10 and 11) not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in a computer. When such descriptive material is

recorded on some computer-readable medium it becomes structurally and functionally

interrelated to the medium and will be statutory in most cases.

Furthermore, software, programming, instructions, or code not claimed as being

computer executable are not statutory because they are not capable of causing

functional change in a computer. In contrast, when a claimed computer-readable

medium encoded with a computer program defines structural and functional

interrelationships between the computer and the program, and the computer is capable

of executing the program, allowing the program's functionality to be realized, the

program will be statutory.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Thomas (U.S Patent #6,128,663) in view of Flemming (U.S Patent #6,473,752).

As per claim 1, Thomas teaches a method for operating with a commercial

system having a display for a user, the method comprising performing the following

procedures during a session with the user:

selecting either one of a plurality of first signals (page request) or one of a

plurality of second signals (demographics identifier), for sending additional information

(customized web page) to the display, the one of the plurality of second signals being to

solicit information about the user [Column 4, lines 28-30 and line 52, and Claim 15].

Thomas is silent regarding a measurement of user response to the selected

signal. However, Flemming teaches a method for locating computer documents or data

of interest to a user by measuring a response of the user (user's interactions) [Column

5, lines 6-11]. It would have been obvious to one of ordinary skill in the art at the time of

invention to modify the teachings of Thomas by adding the user response measurement

taught by Flemming in order to enable the resulting commercial system to provide

useful and effective customized information to the user without having to undergo a

burdensome registration or login process each time the user visits the web site.

The combined teachings of Thomas and Flemming are silent regarding a

decision rule set for selecting one of a plurality of signals. It is old and well known in the

art that a decision rule set (or similar means) exists in computer implemented systems,

such as those taught by Thomas and Flemming, in order to select one of a plurality of

signals. It would have been obvious to one of ordinary skill in the art at the time of

invention to modify the combined teachings of Thomas and Flemming by adding a

decision rule set to help the web site be more effective, useful and desirable for the

user.

The combined teachings of Thomas and Flemming are also silent regarding the updating of a decision rule set in accordance with a probability. However, it is old and well known in the art that decision rule sets are occasionally updated to reflect their validity and accuracy. Decision rule sets with a high probability of success remain unchanged whereas decision rule sets with a low probability of success are updated or modified. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Thomas and Flemming by updating a decision rule set because doing so would increase the probability that the user is provided with information deemed useful and effective.

As per claim 2, Thomas does not teach the conditioning of a selection upon whether certain information is known about the user. However, Flemming teaches a method of conditioning selection upon whether certain information (types of activities in which the user engages) is known about the user [Column 5, lines 49-61]. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Thomas by conditioning selection upon whether certain information is known about the user to make the selected content more useful and effective to the individual user without having to undergo a burdensome registration or login process each time the user visits the web site.

As per claim 3, the combined teachings of Thomas and Flemming fail to teach the method of claim 1, wherein using said decision rule set includes conditioning selection upon whether a model has converged. However, it is old and well known in the

art that a decision rule set can be modified for a variety of reasons. If a predictive model has converged to a single outcome, then that outcome should be reflected in a modification of the decision rule set. For example, if all users of a retailer's web site eventually visit a web page of that site's special offers, then it would be obvious to update the decision rule set to include that web page. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Thomas and Flemming to condition selection upon whether a model has converged in order to make the web site more useful, helpful, effective, and desirable to users, which would lead to increased customer retention or sales.

As per claim 4, the combined teachings of Thomas and Flemming fail to teach the method of claim 1, wherein the one of the plurality of second signals is determined by an Adaptive Homing Process. However, the Adaptive Homing Process and Algorithm are well known in the art. The use of an Adaptive Homing Algorithm to determine one of a plurality of second signals is simply a design choice, as a plurality of other methods could be employed to accomplish the same task. It would have been obvious to one of ordinary skill in the art at the time of invention to employ some analytical process (a signal processing system, device, model, or algorithm) to determine one of a plurality of signals for further processing because of its effect on the content of the additional material presented to the user.

As per claims 5 and 16, the combined teachings of Thomas and Flemming are silent regarding updating a decision rule set depending upon a Markov Decision

Process. It is old and well known in the art that the state transition probabilities of a

Markov Decision Process are entirely dependent on the preceding state. For example, if

the user is at page "A", then there exists a certain probability that they will be

proceeding to related pages "B", "C", "D", etc., which should be encoded in the decision

rule set, which should be updated to reflect the most likely changes in state based on

the state transition probabilities derived from a Markov Decision Process. It is old and

well known in the art that information must be presented to the user in a logical

procession based on the user's state. For example, if the user is browsing for a

particular product, they should be directed to web pages with similar or related products,

whereas if the user has purchased an item, they should be directed to web pages with

discount coupons for future use, a printable receipt for their purchase, or a notification of

order submission. It is inherently illogical to present the user with the information

available on web pages if they have not the completed the preceding function

(purchasing an item, browsing an item, etc). In example, a customer browsing for

microwaves likely would not want to be presented with coupons for lawnmowers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of

invention to modify the combined teachings of Thomas and Flemming to update a

decision rule set based on a Markov Decision Process in order to increase the web

site's usefulness and effectiveness, which may lead to increased customer retention or

sales.

As per claims 6 and 17, the combined teachings of Thomas and Flemming are

silent regarding an update of the decision rule set depending on whether the user

selected a product for purchase. It is old and well known in the art that vendor web sites

direct users to web pages with special offers. For example, if the user starts losing

interest and tries to exit the web site, they should be directed to a web page of special

offers in an attempt to get the user to purchase a certain product or to continue

browsing. If the user has selected a product for purchase, then they should be directed

to similar or related products, or customized special offers for the product selected. If

the user has selected a product for purchase, it is logical to assume that they would not

want to be directed to a web page featuring unrelated products. When the user has

selected a product for purchase, there is an inherent sequence of events that must

occur (selection of quantity, payment and delivery methods, etc). Decision rule sets

need to be updated to reflect the sequence of events that occur after a user has

selected a product for purchase. Doing so would help the web site be more effective

and useful to its users, which may lead to increased customer retention (and sales) as a

result. Therefore, it would have been obvious to one of ordinary skill in the art at the

time of invention to modify the combined teachings of Thomas and Flemming to update

the decision rule set depending on whether the user has selected a product for

purchase for the reasons discussed above therein.

As per claim 7, Thomas teaches a system for operating with a commercial

system having a display for a user, the system comprising:

a selector (remote server) to select either one of a plurality of first signals (page

requests) or one of a plurality of second signals (demographic identifier), for sending

additional information (customized web page) to the display, the one of the plurality of

second signals being to solicit information about the user [Column 4, lines 28-30 and

line 52, and Claim 15];

Thomas does not teach a system that measures a user's response. However,

Flemming teaches a computer implemented system where the response of the user

(user's interactions) is detected by the computer system [Column 5, lines 6-13]. While

not explicitly taught, the logic used to measure user response is embodied by computer

code in the computer implemented system taught by Flemming. It would have been

obvious to one of ordinary skill in the art at the time of invention to combine the

teachings of Thomas and Flemming in order to enable the resulting commercial system

to provide useful and effective customized information to the user without having to

undergo a burdensome registration or login process each time the user visits the web

site.

The combined teachings of Thomas and Flemming are silent regarding a

decision rule set for selecting one of a plurality of signals. It is old and well known in the

art that a decision rule set (or similar means) exists in computer implemented systems,

such as those taught by Thomas and Flemming, in order to select one of a plurality of

signals. It would have been obvious to one of ordinary skill in the art at the time of

invention to modify the combined teachings of Thomas and Flemming by adding a

decision rule set to help the web site be more effective, useful and desirable for the

user.

The combined teachings of Thomas and Flemming are silent regarding an updater that updates the decision rule set. However, it is old and well known in the art that an updater can be embodied as software that updates the decision rule set upon execution or as the programmer responsible for updating constraints and limitations of the decision rule set. As Thomas and Flemming both teach computer implemented methods of customizing information and documents for individual users, this limitation of the claim is met.

The combined teachings of Thomas and Flemming are also silent regarding the updating of a decision rule set in accordance with a probability. However, it is old and well known in the art that decision rule sets are occasionally updated to reflect their validity and accuracy. Decision rule sets with a high probability of success remain unchanged whereas decision rule sets with a low probability of success are updated or modified. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Thomas and Flemming by updating a decision rule set because doing so would increase the probability that the user is provided with information deemed useful and effective.

As per claim 8, the combined teachings of Thomas and Flemming fail to teach a memory that stores demographic information about the user. However, it is old and well known in the art that demographic information about users can be stored within a database. In addition, websites commonly use files called "cookies" to store information on a user's machine. These "cookies" store unique ID numbers for each visitor.

Websites can store user preferences so that the site can look different for each visitor.

For example, if you visit msn.com, it offers you the ability to "change

content/layout/color." It also allows you to change your zip code and get customized

weather information. This information will be stored in the site's database and store a

"cookie" on the user's computer. "Cookies" are used by web sites all over the Internet

and help make the Internet easier to navigate by providing better user experiences and

making it easier to gather accurate information about the site's visitors. The use of

"cookies" also allows the web site to extract information about the user without requiring

a burdensome registration or login process each time the web site is visited. Therefore,

it would have been obvious to one of ordinary skill in the art at the time of invention to

modify the combined teachings of Thomas and Flemming to include "cookies" for the

reasons discussed above therein.

As per claim 9, the combined teachings of Thomas and Flemming fail to teach a

model, wherein the selector conditions selection depending upon whether the model

has converged. However, it is old and well known in the art that a decision rule set can

be modified for a variety of reasons. If a predictive model has converged to a single

outcome, then that outcome should be reflected in a modification of the decision rule

set. For example, if all users of a retailer's web site eventually visit a web page of that

site's special offers, then it would be obvious to update the decision rule set to include

that web page. Therefore, it would have been obvious to one of ordinary skill in the art

at the time of invention to modify the combined teachings of Thomas and Flemming to

condition selection upon whether a model has converged in order to make the web site

more useful, helpful, effective, and desirable to users, which may lead to increased customer retention or sales.

As per claim 10, the combined teachings of Thomas and Flemming fail to teach the system of claim 7, wherein the selector includes a plurality of instructions executable to perform by an Adaptive Homing Process. However, the Adaptive Homing Process and Algorithm are well known in the art. The use of an Adaptive Homing Algorithm to determine one of a plurality of second signals is simply a design choice, as a plurality of other methods could be employed to accomplish the same task. It would have been obvious to one of ordinary skill in the art at the time of invention to employ some analytical process (a signal processing system, device, model, or algorithm) to determine one of a plurality of signals for further processing because of its effect on the content of the additional material presented to the user.

As per claim 11, the combined teachings of Thomas and Flemming fail to teach the system of claim 7, wherein the updater is responsive to a plurality of instructions executable by a processor to perform a Markov Decision Process. However, the computer implemented systems taught by Thomas and Flemming are inherently capable of running instructions (computer code) executable by a (computer) processor. The instructions could direct the system to perform a plurality of processes, applications, or computations, including a Markov Decision Process, the results of which could be used to signal a need to update the decision rule set.

As per claim 12, the combined teachings of Thomas and Flemming fail to teach the system of claim 7, wherein the updater is responsive to whether the user selected to a product for purchase. It is old and well known that web sites create user visitor logs that chronicle various web pages visited by a user on that site. It is also old and well known in the art that vendor web sites direct users to web pages with special offers in an attempt to interest users in purchasing products. For example, if the user starts losing interest and tries to exit the web site, they can be directed to a web page of special offers in an attempt to get the user to purchase a certain product or to continue browsing. If the user has selected a product for purchase, then they can be directed to similar or related products, or customized special offers for the product selected. A user's log of web pages visited during a particular session could be used to signal a need to update the decision rule set, as evidenced above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Thomas and Flemming to update the decision rule set depending on whether the user has selected a product for purchase in order to make the web site more useful, helpful, effective, and desirable to users, which may lead to increased customer retention or sales.

As per claim 13, the combined teachings of Thomas and Flemming disclose computerized implemented methods in a system that meets the limitations of the claim. Therefore, the system components (computers, servers, processors) used by these computerized systems inherently exist and are in use by the systems taught by Thomas and Flemming.

As per claim 14, Thomas does not teach the conditioning of a selection upon whether certain information is known about the user. However, Flemming teaches a method of conditioning selection upon whether certain information (types of activities in which the user engages) is known about the user [Column 5, lines 49-61]. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Thomas by conditioning selection upon whether certain information is known about the user to make the selected content more useful and effective to the individual user without having to undergo a burdensome registration or login process each time the user visits the web site.

As per claim 15, the combined teachings of Thomas and Flemming fail to teach the system of claim 13, wherein means for using said decision rule set comprises means for conditioning selection upon whether a model has converged. However, it is old and well known in the art that a decision rule set can be modified for a variety of reasons. If a predictive model has converged to a single outcome, then that outcome should be reflected in a modification of the decision rule set. For example, if all users of a retailer's web site eventually visit a web page of that site's special offers, then it would be obvious to update the decision rule set to include that web page. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Thomas and Flemming to condition selection upon whether a

model has converged in order to make the web site more useful, helpful, effective, and desirable to users, which may lead to increased customer retention or sales.

As per claim 18, the combined teachings of Thomas and Flemming disclose computerized systems that meet the limitations of the claim. Therefore, the software used by these computerized systems inherently exists and is in use by the systems taught by Thomas and Flemming.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Robinson (U.S Patent #5,918,014) teaches an automated system in an interactive communication medium for selectively displaying one or more advertisements to a subject based on the user's actions. The advertisements shown are determined by the characteristics of the user's "community" (other users with similar user profiles).

Cuomo et al. (U.S Patent #6,185,614) teaches a method and system for collecting user profile information over the Internet. This information is used to dynamically generate a web page with customized content. The system monitors the user's previous behavior at the site, demographic information, access permissions, and the user's identity to determine the best way to customize the web page content.

Welsh et al. (U.S Patent #6,757,691) teaches a computer-implemented method

of predicting content choices by searching a profile database. An identifier associated

with a user is received. The method then predicts content choices that are likely to be of

interest to the user based on a relationship between the accessed psychographic profile

and available content. The method monitors the user's activities and continually refines

the associated psychographic profile based on the user's activities, which include

patterns, inputs (keystrokes, mouse clicks, remote control button activations, etc), and

product purchases.

Martin et al. (U.S Patent #6,338,066) teaches a web-based system for predicting

web-surfer behavior. Given a log of previous web-surfer behavior listing the order in

which each surfer downloaded specific items, and given a meaningful classification of

those same items, future surfer behavior is predicted by the present invention. A

computer program is used to record a log of users' activities at a website, where the log

is sessionalized for each user. A predictive model is then used to predict the user's

behavior and to generation a behavior vector given a feature vector.

Murphy (U.S Patent #6,615,247) teaches a system and method for customizing

requested web pages based on information such as the previous location visited by the

customer and the search term used by the customer. When a customer lands on a

vendor's web site, the customer's web browser reports the referring URL to the vendor's

web site, where it is parsed and examined. The customized web page may contain

special promotional offers, such as a coupon, or links to other web pages related to the

information retrieved from the parsed URL.

Burge et al. (U.S Patent #6,014,638) teaches a system for customizing computer

displays in accordance with user preferences. The system monitors and records a

user's navigational choices to determine the user's needs and preferences for

subsequent computer displays. Displays are customized in accordance with the user's

needs and preferences. Various attributes of web pages are modified as they are

accessed by users.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peter Choi whose telephone number is (703) 305-0852.

The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

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PC

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